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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,507	11/19/2003	Ronald D. McCallister	1826-310RI	1244

7590 04/01/2008
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EXAMINER

CORRIELUS, JEAN B

ART UNIT	PAPER NUMBER
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2611

MAIL DATE	DELIVERY MODE
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04/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No. 10/718,507	Applicant(s) MCCALLISTER ET AL.	
Examiner Jean B. Corrielus	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 January 2008.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2-4, 6-10, 14, 19, 20, 24-29, 42-44, 47-55, 58, 59 and 61-64 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 2-4, 6-8, 14, 19, 20, 58 and 61-64 is/are allowed.
- 6) Claim(s) 9, 24-29 and 50 is/are rejected.
- 7) Claim(s) 10, 42-44, 47-49, 51-55 and 59 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Response to Amendment

1. The communication filed 1/17/08 improperly list claims 30-37 as pending. The status of such claims should be “cancelled”. Please update claim status in subsequent communication(s).

Allowable Subject Matter

2. The indicated allowability of claims 9 and 50 is withdrawn in view of the inventor’s submission, filed 11/8/07. Rejections based on the inventor’s submission follow.

Claim Objections

3. Claims 10, 24-29, 42-44, 47-55, and 59 are objected to because of the following informalities: 10 does not generate any “final output” (i.e. an output to generate a transmission signal). Claim 24, line 21, “to-provide” should be replaced by “to provide”. Claim 42”type” is mistyped as tvpe”. Claim 26, line 7, shouldn’t “coincident ally” be replaced by “coincidentally”? As per claim 47, see claim 10; in addition, "type" is mistyped as "tvpe" in the last two full paragraph. The same comment applies to claim 48. As per claim 50, see claim 10. In addition, claim 50, line 13, please delete the period. As per claim 51, see claim 51. As per claim 55, see claim 10. Claim 55, last paragraph “signal” is mistyped as “sianal”. Claim 59, line 4, shouldn’t “faltering step” be “filtering step”? Note that any claim whose base claim is objected is likewise objected. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 24-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24, line 28, it is unclear whether the limitation “said complex summing circuit” refers to the limitation in line 14 or line 24. Note that any claim whose base claim is rejected is likewise rejected.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 9 and 50 are rejected under 35 U.S.C. 102(a) as being anticipated by May et al.

As per claim 9, May teaches a transmitter circuit see page 2474, col. 1, line 4 comprising inherently a modulated signal generator for generating a first modulated signal **s (t)** (note that in order to generate the modulated signal **s (t)** a pulse spreading filter has to be used) conveying to be communicated data having a first bandwidth and having a first peak-to-average amplitude ratio see page

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2474, col. 2, lines 2-8 and page 2475, col. 1, lines 36-38; generating a constrained bandwidth error signal $K(t)$ in response to said first modulated signal $s(t)$ (note that in order to generate the error signal $K(t)$, a constrained envelope generator having a pulse spreading filter has to be used, hence such an element is inherent in May et al) see page 2475, col. 2, line 1; combining said error signal $K(t)$ with the modulated signal $s(t)$ see page 2475, col. 2, last three equations (note that in order to combine the signal a combining circuit has to be used, hence a combining circuit is inherent in May) to produce a second modulated signal conveying said to be communicated data having said first BW and said first PAR see page 2475, col. 1 section B- page 2476, col. 1, first full paragraph. In addition, as noted in the inventor submission filed on 7/5/05, a delay coupled between said modulated signal generator and said combining circuit to delay said first modulated signal into synchronism with said constrained bandwidth error signal, is inherent. In addition, May teaches a linear amplifier see fig. 1 that shows the linearity of the amplifier up to the saturation point in addition, note the inventor's submission, dated 8/28/06 that clearly states that the May's reference teaches the linearizer limitation. In addition, per the inventor's submission filed on 11/08/07, page 9, the May reference teaches at page 2476 first paragraph, first column that an auxiliary function which produces no out of band interference is determined indicating that the first and second spreading filters have similar transfer characteristics.

As per claim 50, see claim 9.

Allowable Subject Matter

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6. Claims 10, 42-44, 47-49, 51-55 and 59 would be allowable if amended to overcome the objection set forth above

7. Claims 24-29 would be allowable if amended to overcome the 112 rejection set forth above

8. Claims 2-4, 6-8, 14, 19-20, 58, 61-64 are allowed

Examiner's comment

9. The inventor's submission filed on 11/8/07 is acknowledged. However, the inventor's comment is insufficient to withdraw the allowability of claims 2-4, 6-8, 10, 14, 19-20, 24-29, 42-44, 47-49, 51-55, 58, 59, 61-64. Although, the invention in this application and May are directed towards the same core concept, as also acknowledged by the inventor, examiner noted that they differ a great deal in term of actual implementation and details. For instance the details relating to claim 6, last 2 full paragraphs are not explicitly disclose in the May 's reference and the same comment applies to claim 10, last 7 lines; claim 47, last two full paragraphs; claim 51, last 7 lines and claim 61, last 10 lines. With respect to claim 24, the structure of the envelope generator, as claimed, is not even disclosed in May's reference. in other words, in combination with the other claimed features, May does not explicitly teach an envelope generator comprising a complex summer coupled to the first nyquist filter and the threshold generator and associated details; a discriminator coupled to the said complex summing circuit and a second nyquist filter and associated details. With respect to claim 55, May does not explicitly teach a combining circuit coupled to said

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pulse spreading filter, said off-time constrained envelope generator and said on-time constrained envelope generator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Monday-Thursday from 9:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean B Corrielus/

Primary Examiner, Art Unit 2611